

October 1978

Ron Jeffries, Publisher



"Ballet never becomes easy.
It just becomes possible".
- Agnes de Mille

A CURSORY GLANCE

Box 550 GOLETA, CALIFORNIA 93017

The road to hell, it is said, is paved with good intentions. Well, I guess I know where I'm headed, because we sure had good intentions about getting #4 out early. This one is so late that it is almost crazy to call it the "October" issue, but we will anyway.

We must have done something right with CURSOR #3, because we've gotten lots of very nice letters. Seems that lots of people tried the sound effects on QUIX, and became addicted. Well, you aint seen nothing yet! Glen Fisher has produced an outstanding musical cover this month. In fact, if you don't hook your PET up for sound for this issue, you will lose out on two programs: COVER and CLOCK. See the Notes for CURSOR #3 for technical details on how to hook up sound (Pin M and 12 on the user port...) RADIO SHACK sells a nice little 200mw Speaker/Amplifier, catalog number 277-1008, costs about \$11, looks like a small radio. It comes with a short shielded cable - all you need is an edge connector for the PET, and solder two wires to that connector. Hey, someone out there thought we meant for them to actually solder right to the connector that comes out the back. No way! You should buy the correct slip-on connector (female), ...it really should be "keyed" so it can only be put on the correct direction, then you solder to the pins that come from this slip-on connector. Soldering stuff on the PET board has been known to cause the ghost of Chuck Peddle to cringe, even if he has defected to APPLE.

Thank you again for your support. We plan to start national advertising in the near future. Based on the best information now available, I expect that our subscription price will have to increase before too long. (Actually, my accountant is standing here with a .45 pointed at my head, forcing my to write these words.) We will try to maintain a very competitive price, but we need to allow for a bigger advertising budget, and we'd like a little more flexibility in what we can afford to provide to you. So, tell your friends that prices will be going up at the beginning of 1979.

OSBORNE BASIC PROGRAMS AVAILABLE NOW

One of the most highly respected publishers in the microcomputer industry is Osborne & Associates, Inc. CURSOR has made arrangements to distribute the excellent book SOME COMMON BASIC PROGRAMS, as well as a cassette tape which includes all those programs for the PET. We are offering this combination for only \$17.95 including shipping in the United States. (California residents add 6% tax). If you want a wealth of practical programs for your PET, you should order this book and cassette from us today.

SERIOUS USES OF SMALL MACHINES, REVISITED

My comments about so-called "serious" uses of PETs and other creepy crawly computers kept the mailperson busy this last month. I guess we must have struck a nerve: you go and spend about \$800 perfectly good dollars for a nice looking little box. Your mother is impressed, your kids are impressed, but your spouse says "\$800 would sure buy a hell of a nice (stereo/microwave oven/waterbed/used car/carpet/etc.)" I know, you were going to keep your inventory or general ledger or payroll or whatever, right? But then you found out that it takes lots of storage, fast non-tape storage like double-density floppy disks to store enough stuff for these applications to be practical. Then there is the little matter of "hard copy", and the sad story of the \$595 printer that may never be built, or when it is available, it may cost \$995. OK, this all sounds kinda grim, and I think in some cases it is: people are being sold computers that just plain won't do what they need for a specific application. (My sources tell me that Radio Shack has this problem, and has put out the word to their dealers to "cool it" with over-enthusiastic but naive customers.) OK - I still want to hear from those of you that are doing honest work with these machines. Let me know, and I'll be glad to share your experinces with our readers.

About the biggies: Texas Instruments will probably be ready about next summer. Please don't be suprised if they bring out a machine that has built-in reliable mass storage using "bubble memory". Also, expect to see both Basic and Pascal as languages on the machine. Or...look for the IBM personal computer (not to be confused with their 5110, which is small, but expensive). IBM would emphasize the APL language, (it is not clear that anyone at IBM even knows how to spell Pascal, much less market it...)

CUSOR #4 HAS THESE PROGRAMS:

COVER A delight to your eyes and your ears. Notes dance around the keyboard as the three musical pieces play. Songs are: Wiltshire reel, the fiddle tune "Devil's Dream", and a Scicilian tarantella.

BOP Chisanbop - the Korean technique of counting to 99 on your fingers.

CALC Everything you ever wanted in an \$800 calculator. Hex, octal, decimal. Integer math only.

CLOCK An \$800 digital alarm clock that also chimes on each quarter hour. Submitted by: John Fox, 23314 W. Sheffler, Elmira, OR 97437.

INP A short but powerful subroutine for use in your programs. Designed to be easy to merge with your code. Solves your input problems in an elegant fashion.

CED The Cursor Editor. Allows you to enter, edit, save and load three screens of text.

MORE ABOUT THE PROGRAMS

BOP...We use some "flashy" PET graphics to teach the Chisanbop method of counting. In Chisanbop, you press your fingers against a table to "make a number". Your right fingers are each "worth" one, your right thumb is worth 5. Your left fingers are each worth 10, and your left thumb is worth 50. There are 4 options, all are obvious except the one where you "set" the fingers to produce a number. Use ">" to move the pointer to the right, and press RVS to change a finger. When you have all the fingers set, type RETURN to let the program know you are done. Written by Glen Fisher.

CALC...This calculator really acts like a calculator. It has a display, where you enter the number, and it has an "A register" (oh well, we had to call it something) where the results of each operation are stored. It also has a single "memory" - you store stuff by pressing "S", and recall numbers by "R". There is a global number base, which starts out as base ten. You can change it by using the "#" key, followed by H for hex, O for octal, or T for base ten. (D for decimal wasn't handy, since D is a legal hex digit...) To convert from one number base to another, set the global base as that base you want to convert to, and then use our "local base" feature to enter the base and number you want to convert from. You do this by just prefixing the number with the appropriate base, e.g. to enter a hex number when the global base is set to decimal, type "H255" then an equals sign. You can use addition, multiplication, division and subtraction in the obvious fashion. Other operations:

DEL Clear entry
INST Clear all registers
#H Set global base to hex
S Store contents of A register in memory register
R Recall memory
HOME Change sign of entered number
↑ Copy A register down to the display
< Show value of the high byte of the A register
> " " low " "
" Peek at the word at the location given by A register
' Peek at the byte at the location given by A register

"...not the million oriented facts
but the one or two facts
out of place..."

A.R. Ammons

CLOCK...After you set the time, you can also set an alarm. If you want a little music on demand, press the exclamation key "!"

INP...You need a friendly input routine if your programs are to be friendly! We are placing INP in the public domain for personal use: please feel free to use it in your programs. If it is included in programs that are sold, please include this notice: "INP routine, used with permission from CURSOR, Box 550, Goleta, CA 93017." We went to a lot of trouble to make INP fit on a little less than one screen, so that it will be easy to "merge" with other programs. Here is how: 1. Load INP into your PET. 2. Position tape that has your program on it to just before the program starts. 3. Clear the screen, and LIST the INP routine. 4. Move the cursor to right over the word "READY" Type "LOAD " (notice the two trailing blanks). Don't press RETURN yet. Now, press PLAY on the recorder, then press RETURN. 5. After your program has loaded, press "HOME" to get to the top of the screen. Now, press RETURN 12 times (once for each line of INP). 6. Now, save the results on another tape. (This all sounds hard. It isn't.

Before you use INP, set CR\$ = CHR\$(13) as this will give you a RETURN after the user presses RETURN. If you will be using upper and lower case, add these two statements to your program:
POKE 59468,14: FL=1 (The poke just switches you to upper and lower case mode. FL=1 tells INP that you want the keyboard to act like a typewriter (i.e. shifted keys are caps...) Now, you are ready to print your prompt, then GOSUB 60000. After the user types his/her response, it will be available to you in the variable IN\$. Some Features: INP accepts only visible characters. DEL deletes previous character. A shifted RETURN throws away the entire line. A shaded cursor is used to distinguish INP from normal input mode. (Change line 60020 if you want something different). Local variables in INP all start with "z".

MORE "MORE ABOUT THE PROGRAMS"...

CED... The Cursor Editor. With this program you can work on three PET pages of text at once (well, you actually work on a page at a time, but they are all available to you. When you first run the program, it will tell you that it is off doing some work. When it is ready for you, it will display the little "checked flag" cursor. To enter the text, just type it in. The cursor control keys all work, except the "CLR" key has been disabled to protect you from wiping out a bunch of typing by accident. (CLR does provide a home to left lower corner function, however.) INST and DEL insert and delete text. DEL works on the character under it, instead of the one to the left, as the PET does. These keys affect the entire page of text, i.e. lines will wrap around, etc. There is also a "local" or line oriented insert key, the "█" key, and the "backarrow" is the line delete function.

To give the editor commands, press the pi key "⌘". The program will store away the first line of text, and then give a number, followed by a colon, e.g. 2: means "You are working on page 2". You can press RETURN and go on typing, or you can give a command.

S SAVE a file. It will ask you for a filename. BE CAREFUL ABOUT WHAT TAPE IS IN THE DRIVE!

L LOAD a file. If you can't remember the name, type RETURN, and it will automatically load the next file on the tape.

D A shifted D puts you in graphics mode. Unshifted D gives you upper-lower case.

⌘ The pi key first gets you into command mode. Then, if you press it again, you can redefine this "escape to command level" character. The only reason to do so would be if you want to enter the pi character as part of your text.

Q QUIT, just what it says. You are warned to save your file if you haven't. (You get one chance. After that we assume you are a big girl and know what you are doing!) It is quite important that you only quit via the Q command. Otherwise, turn your machine off, then turn it back on to clear some pointers that we diddle with. Or, you could type: poke 134,0: poke 135,32. Also, if you want to rerun the CED program without reloading the tape, type CONT rather than RUN after you have quit. Otherwise you will get an "out of data" error.

At the command mode, you can go to another page by just typing the number of that page. So, if you have typed all of page 1, and want to type on page 2, then you would type "⌘" followed by "2".

CLR At the command mode only, CLR will clear your screen. (We made it hard on purpose - we sometimes need to be protected from ourselves...)

HACKER HINTS

- You can "escape" from our fancy input routine by pressing the "RUN" key. "STOP" doesn't work, however.
- As every PET programmer knows, Commodore didn't provide a DELETE command to get rid of a bunch of lines. You can use a little one-line program to help solve the problem. Say you want to get rid of lines 10 to 100. Type: FOR I = 10 to 100 step 10: ?I: NEXT I
It will print a bunch of number on the screen. Just press "HOME", then hit RETURN about 24 times, and you won't have near as many lines to kick around...
- After you read a tape, type: ?PEEK(630) If it says zero, great! (Divide the number if reports by 2 to get the number of tape drop outs the system encountered.)

For Hackers only: Subscribe to MICRO, The 6502 Journal 6 issues=\$6

56 Central Square

Chelsford, MA 01824

This magazine specializes in 6502 esoterica, as well as lots of non-esoteric material. Worth every penny to the serious hobbyist.

STUFF TO KNOW ABOUT

Compu-Quote/6914 Berquist Ave, Canoga Park, CA 91307/ (213) 348-3662

Sells a nice video checkers game for the PET. Be sure and specify PET version. \$14.95

HUH Electronics/1429 Maple St., San Mateo CA 94402/ (415) 573-7359

Beeper - plugs into your PET so that when the motor shuts off there is a little "beep". Handy when you are loading long files. \$24.95

Petunia - Nice four-note music. (Remember, the Cover of this issue only plays one note at a time).

The sound is very good - comes with reasonable software (well, the software is an extra \$14.95).

Petunia costs \$29.95.

Tychon

TYCHON, Incorporated, P.O. Box 242, Blacksburg, VA. 24060
703-951-9030

News Release

For immediate release

Sir:

The Blacksburg Group continues to be interested in identifying new authors who could contribute well-written technical books to both the "Blacksburg Continuing Education Series" and to the "Bugbook" series. There are now over 20 books in these series, with a quarter of a million books in print. These series cover topics from basic electronics through microcomputer hardware and software. We are always looking for new books on timely subjects that are a mix of practical tutorial material and experimental material.

We imagine that many of your readers would be interested in writing a book, but who, for one reason or another have put it off. Perhaps they don't know how to get started. We can offer individual attention from one of our editors to help get a book ready for publication. Many authors realize that having their own book published is an excellent way to gain professional recognition and international exposure. A large financial return is also quite possible.

We would appreciate it if you would call this publishing opportunity to the attention of your readers. We would be pleased to send additional information to those readers who are interested. They may contact us at:

"The Blacksburg Group"
c/o Tychon, Incorporated
P.O. Box 242
Blacksburg, VA 24060
(703) 951-9030

Picture by
Jenni Jeffries

